

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-52. (Cancelled)

53. (Currently Amended) A method, comprising:

receiving a haptic-feedback signal at a haptic-feedback device to output a haptic feedback force, the haptic-feedback device ~~being~~ configured to provide input data to ~~an associated graphical environment~~ control a graphical object in a graphical environment on a display screen; and

filtering the input data ~~when the haptic-feedback signal causes outputting of haptic feedback, the filtering~~ based on the haptic-feedback signal to ~~produce the input data operative to~~ reduce visual disturbance of the to a user-controlled graphical object displayed in the associated graphical environment when the haptic-feedback device outputs the haptic feedback force; wherein the filtering input data further includes identifying the visual disturbance in response to the outputting of haptic feedback.

54. (Cancelled)

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55. (Currently Amended) A method, comprising:

receiving a haptic-feedback signal at a haptic-feedback device, wherein the haptic-feedback device outputs a haptic feedback force upon receiving the haptic-feedback signal; and

filtering input data from the haptic-feedback device upon the haptic-feedback device receiving the haptic-feedback signal by time-averaging the input data to create filtered input data,

wherein the haptic-feedback device provides the filtered input data to control a graphical object with reduced visual disturbance in a graphical environment shown on a display screen when the haptic feedback force is output by the haptic-feedback device. ~~the filtering also based on the haptic feedback signal to produce the filtered input data operative to reduce visual disturbance to a user controlled graphical object displayed in an associated graphical environment, the haptic-feedback device being configured to provide the filtered input data to the associated graphical environment, wherein the filtering input data further includes identifying the visual disturbance in response to the outputting of haptic feedback~~

56. (Currently Amended) A method, comprising:

receiving a haptic-feedback signal at a haptic-feedback device to output a haptic feedback force, the haptic-feedback device ~~being~~ configured to provide input data to ~~an associated graphical environment~~ control a graphical object in a graphical environment shown on a display screen; and

filtering the input data to produce a held data value, the filtering including sampling and holding data based on a movement of the haptic-feedback device without the output of the haptic feedback force, ~~the input data including the held data value, the filtering also based on the haptic-feedback signal to produce the input data being operative to reduce visual disturbance to a user controlled of the graphical object displayed in the associated graphical environment when the haptic feedback device outputs the haptic feedback force,~~ ~~wherein the filtering input data further includes identifying the visual disturbance in response to the outputting of haptic feedback~~

57-60. (Cancelled)

61. (Currently Amended) A method, comprising:

receiving a haptic-feedback signal at a haptic-feedback device;

outputting a haptic-feedback force from the haptic-feedback device based on the haptic-feedback signal;

generating sensor data in response to sensing movement of the haptic feedback device;

filtering the sensor data to produce input data according to a disturbance filter process including time-averaging the sensor data, the disturbance filter process being associated with the haptic feedback signal, wherein filtering the sensor data is configured the sensor data being based on a movement of the haptic-feedback device during the outputting of the haptic-feedback, the filtering of the sensor data operative to reduce visual disturbance to a user-controlled graphical object displayed in a an-associated graphical environment shown on a display screen when the haptic feedback device outputs the haptic feedback force; caused by the output of the haptic-feedback; and

updating the ~~associated~~ graphical environment based on the input data.

62-65. (Cancelled)

66. (Currently Amended) An apparatus comprising:

an actuator coupled to a haptic feedback device, the actuator configured to receive a haptic-feedback signal, ~~the actuator configured to produce a haptic feedback force based on the haptic-feedback signal;~~

a sensor coupled to the actuator, the sensor configured to detect a movement of the ~~actuator~~ haptic feedback device wherein the sensor outputs sensor data associated with the movement; and

a filter configured to receive the sensor data ~~from the sensor~~ and to provide input data based on the haptic-feedback signal to control a graphical object in a an-associated graphical environment shown on a display screen with reduced visual disturbance of the graphical object on the display screen when the haptic feedback device outputs the haptic feedback force. ~~based on the haptic-feedback signal, the filter being configured to receive a command from a processor in communication with the filter to activate the filter, the filter being configured to reduce undesired display effects associated with force sensation in a graphical environment.~~

67-68. (Cancelled)

69. (Currently Amended) The method of claim 53, further comprising determining a position of ~~[[a]]~~ the graphical object in the associated graphical environment based on the input data.

70. (Previously Presented) The method of claim 53, further comprising sending the input data to a processor.

71. (Currently Amended) The method of claim 53, ~~further comprising outputting the haptic feedback based on the haptic-feedback signal, the outputting haptic feedback and the~~ wherein the filtering of the input data being is performed by a processor local to the haptic-feedback device.

72. (Currently Amended) The method of claim 53, ~~further comprising outputting the haptic feedback based on the haptic-feedback signal, the outputting the haptic feedback and~~

~~wherein the filtering of the input data being is performed by a processor configured to control the associated graphical environment, the processor remote from the configured to be in communication with the~~ haptic-feedback device.

73. (Currently Amended) The method of claim 53, wherein the ~~outputting the haptic feedback signal is configured to be~~ correlated with data values associated with an event in the associated graphical environment.

74. (Previously Presented) The method of claim 53, wherein the filtering includes sampling the input data over time according to a sampling rate.

75. (Currently Amended) The method of claim 53, wherein the filtering includes time-averaging the input data ~~to produce filtered input data.~~

76. (Currently Amended) The method of claim 53, wherein the filtering includes sampling and holding a data value derived from the input data based on a movement of the haptic-feedback device to produce a held data value, ~~the input data includes the held data value.~~

77. (Previously Presented) The method of claim 53, wherein the filtering includes executing a driver on a processor configured to be in communication with the haptic-feedback device.

78. (Currently Amended) The method of claim 53, further comprising updating a position of ~~[[a]]~~ the graphical object in the ~~associated~~ graphical environment based on the input data.

79. (Previously Presented) The method of claim 55, further comprising determining a position of a graphical object in the associated graphical environment based on the input data.

80. (Previously Presented) The method of claim 55, further comprising sending the input data to a processor.

81. (Currently Amended) The method of claim 55, ~~further comprising outputting the haptic feedback based on the haptic feedback signal, the outputting haptic feedback and~~ wherein the filtering of the input data ~~being~~ is performed by a processor local to the haptic-feedback device.

82. (Currently Amended) The method of claim 55, ~~further comprising outputting the haptic feedback based on the haptic feedback signal, the outputting the haptic feedback and~~ wherein the filtering of the input data ~~being~~ is performed by a processor configured to control the ~~associated~~ graphical environment, the processor remote from the ~~configured to be in communication with the~~ haptic-feedback device.

83. (Currently Amended) The method of claim 55, wherein the ~~outputting the~~ haptic feedback signal is ~~configured to be~~ correlated with data values associated with an event in the ~~associated~~ graphical environment.

84. (Previously Presented) The method of claim 55, wherein the filtering includes executing a driver on a processor configured to be in communication with the haptic-feedback device.

85. (Currently Amended) The method of claim 55, further comprising updating a position of a graphical object in the ~~associated~~ graphical environment based on the input data.

86. (Currently Amended) The method of claim 56, further comprising determining a position of a graphical object in the ~~associated~~ graphical environment based on the input data.

87. (Previously Presented) The method of claim 56, further comprising sending the input data to a processor.

88. (Currently Amended) The method of claim 56, ~~further comprising outputting the haptic feedback based on the haptic-feedback signal, the outputting haptic feedback and wherein~~ the filtering of the input data ~~being~~ is performed by a processor local to the haptic-feedback device.

89. (Currently Amended) The method of claim 56, ~~further comprising outputting the haptic feedback based on the haptic-feedback signal, the outputting the haptic feedback and wherein~~ the filtering of the input data ~~being~~ is performed by a processor configured to control the ~~associated~~ graphical environment, the processor remote from the ~~configured to be in communication with the~~ haptic-feedback device.

90. (Currently Amended) The method of claim 56, wherein ~~the outputting~~ the haptic feedback signal is ~~configured to be~~ correlated with data values associated with an event in the ~~associated~~ graphical environment.

91. (Previously Presented) The method of claim 56, wherein the filtering includes executing a driver on a processor configured to be in communication with the haptic-feedback device.

92. (Currently Amended) The method of claim 56, further comprising updating a position of a graphical object in the ~~associated~~ graphical environment based on the input data.

93. (Currently Amended) The method of claim 61, further comprising determining a position of a graphical object in the ~~associated~~ graphical environment based on the input data.

94. (Previously Presented) The method of claim 61, further comprising sending the input data to a processor.

95. (Currently Amended) The method of claim 61, ~~further comprising outputting the haptic feedback based on the haptic feedback signal, the outputting haptic feedback and wherein~~ the filtering of the input data ~~being~~ is performed by a processor local to the haptic-feedback device.

96. (Currently Amended) The method of claim 61, ~~further comprising outputting the haptic feedback based on the haptic feedback signal, the outputting the haptic feedback and~~ wherein the filtering of the input data ~~being~~ is performed by a processor configured to control the ~~associated~~ graphical environment, the processor remote from the ~~configured to be in communication with the~~ haptic-feedback device.

97. (Currently Amended) The method of claim 61, wherein ~~the outputting the haptic feedback signal is configured to be~~ correlated with data values associated with an event in the ~~associated~~ graphical environment.

98. (Previously Presented) The method of claim 61, wherein the filtering includes executing a driver on a computer configured to be in communication with the haptic-feedback device.

99. (Previously Presented) The method of claim 61, further comprising updating a position of a graphical object in the associated graphical environment based on the input data.

100. (Currently Amended) The apparatus of claim 66, further comprising a processor local to the haptic-feedback device, the processor configured to output the haptic feedback force based on the haptic-feedback signal.

101. (Currently Amended) The apparatus of claim 66, further comprising a processor in communication with the haptic feedback device and remote therefrom, the processor configured

to control the associated graphical environment and output the haptic feedback based on the haptic feedback signal.